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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,335	12/09/2003	James E. Pickering	86414WRZ	3546

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EXAMINER	
COLILLA, DANIEL JAMES	
ART UNIT	PAPER NUMBER
2854	

DATE MAILED: 01/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/731,335	PICKERING ET AL.	
	Examiner	Art Unit	
	Daniel J. Colilla	2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9,11-13,15-28 and 30-32* is/are rejected.

7)☒ Claim(s) *10,14 and 29* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 December 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *20031209*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: **46** (as mentioned on page 14, line 7 of the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 13 and 24 are objected to because of the following informalities:

In line 2 of claim 13, "a" appears to be a typographical error. Appropriate correction is required.

In line 2 of claim 24, it appears that, "increasing" should actually be --increase--.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed.

Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/731,705. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of the copending application recites all that is recited in claim 1 of the present application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claim 20 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 17 of copending Application No. 10/731,705. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of the copending application recites all that is recited in claim 17 of the present application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 5-9, 11, 13, 17, 20, 22-26, 28 and 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Goldberg et al. (US 6,513,924).

With respect to claim 1, Goldberg et al. discloses a system for treating a recording element including a carrier removal station 70 (col. 6, lines 36-41) which removes a portion of a carrier from the recording element 62. While Goldberg et al. does not explicitly recite that a predetermined percentage of carrier is removed, it is inherent in the design of the system that the carrier removed be within an adequate, predetermined range that achieves the desired function without removing too much carrier and causing damage to the recording element. Col. 6, lines 61-67 and col. 7., lines 1-7 of Goldberg et al. disclose how various aspects of the system are controlled in order to evaporate a desired amount of the carrier. Also disclosed by Goldberg et al. is a converting station 72,74 positioned downstream of the carrier removal station 33, which increases the recording element's durability by applying a binder (Goldberg et al., col. 6, lines 42-50).

With respect to claims 5, 6 and 7, Goldberg et al. discloses a heating device in the carrier removal station that can be a heating element, an infrared radiation element or a device for blowing heated air (col. 4, lines 30-37 and lines 46-49).

With respect to claim 8, Goldberg et al. discloses that the carrier removal station 70 and the converting station 72,74 are adjacent to one another in the sense that they are next to each other as shown in Figure 3 of Goldberg et al.

With respect to claim 9, Goldberg et al. discloses that the carrier removal station 70 and the converting station 72,74 are spaced apart from one another as shown in Figure 3.

With respect to claim 11, Goldberg et al. discloses a controller 92 connected to the carrier removal station 70 which can adjust an operating parameter (temperature) of the station 70 (Goldberg et al., col. 6, lines 61-67).

With respect to claim 13, the controller 92 controls the temperature based on the type of textile being printed and the amount of pre-treat, ink and binder deposited on the textile (Goldberg et al., col. 6, lines 61-67). This information must inherently be stored in an electronic form for the controller for to access and use this information.

With respect to claim 17, the converting station 72,74 includes heater 72.

With respect to claim 20, Goldberg et al. discloses a method of treating a recording element including the steps of removing a predetermined percentage of carrier with a carrier removal station 70 (col. 6, lines 36-41) which removes a portion of the carrier from the recording element 62. While Goldberg et al. does not explicitly recite that a predetermined percentage of carrier is removed, it is inherent in the design of the system that the carrier removed be within an adequate, predetermined range that achieves the desired function without removing too much carrier and causing damage to the recording element. Col. 6, lines 61-67 and col. 7., lines 1-7 of Goldberg et al. disclose how various aspects of the system are controlled in order to evaporate a desired amount of the carrier. Also disclosed by Goldberg et al. is a step of increasing a

durability characteristic of the recording element with binding and heating devices 72 and 74 respectively (Goldberg et al., col. 6, lines 42-50). The step of increasing the durability with devices 72 and 74 is distinct from the step of removing a carrier with heating device 70.

With respect to claim 22, the heating device 74 applies heat to the recording element.

With respect to claim 23, the step of removing a percentage of carrier is performed with heater 70.

With respect to claim 24, the heater 70 preheats the recording element prior to increasing the durability characteristic of the recording element.

With respect to claim 25, Goldberg et al. discloses controller 92 which controls the temperature to evaporate the carrier (col. 6, lines 61-67) which will have some percentage value associated with it.

With respect to claims 26 and 28, adjusting the temperature using the controller 92 as mentioned above will adjust the percentage of carrier removed.

With respect to claim 30, Goldberg et al. discloses that the carrier can be removed by an air flow (col. 4, lines 30-37 and lines 46-49).

8. Claims 1 and 15-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Takekoshi et al. (JP 10-291304).

With respect to claim 1, Takekoshi et al. discloses a system for treating a recording element including a carrier removal station 103. Paragraph [0016] of the machine translation of Takekoshi et al. discloses that heater 103 dries the recording element which inherently involves evaporating a fluid carrier from a recording element. While Takekoshi et al. does not explicitly

recite that a predetermined percentage of carrier is removed, it is inherent in the design of the system that the carrier removed be within an adequate, predetermined range that achieves the desired function without removing too much carrier and causing damage to the recording element. Also disclosed by Takekoshi et al. is a converting station 105,106 positioned downstream of the carrier removal station 103, which increases the recording element's durability through heat and pressure and stabilizes the image as disclosed in paragraph [0002] of the machine translation of Takekoshi et al.

With respect to claim 15, Takekoshi et al. discloses that the converting station includes a pair of rollers 105,106 that apply pressure to the recording element as shown in Figure 1 of Takekoshi et al.

With respect to claims 16-17, roller 105 comprises a heat source as mentioned in paragraph [0022] of the machine translation of Takekoshi et al.

With respect to claims 18-19, Takekoshi et al. discloses footprint and height dimensions of the apparatus which would be desktop dimensions if the apparatus were to be supported by a desktop.

With respect to claim 20, Takekoshi et al. discloses a method of treating a recording element including the steps of removing a predetermined percentage of carrier in the recording element using heater 103 (see paragraph [0016] of the machine translation of Takekoshi et al.) and increasing a durability characteristic of the recording element with heating roller 105 and pressure roller 106 which increases the recording element's durability through heat and pressure and stabilizes the image as disclosed in paragraph [0002] of the machine translation of Takekoshi et al. While Takekoshi et al. does not explicitly recite that a predetermined percentage of carrier

is removed, it is inherent in the design of the system that the carrier removed be within an adequate, predetermined range that achieves the desired function without removing too much carrier and causing damage to the recording element.

With respect to claim 21, the rollers 105 and 106 apply pressure to the recording element.

With respect to claim 22, the roller 105 applies heat to the recording element.

With respect to claim 23, the step of removing a percentage of carrier is performed with heater 103.

With respect to claim 24, the heater 103 preheats the recording element prior to increasing the durability characteristic of the recording element.

9. Claim 20 is rejected under 35 U.S.C. 102(e) as being anticipated by Jurrens et al. (US 6,679,599).

With respect to claim 20, Jurrens et al. discloses a method of treating a recording element including the steps of removing a predetermined percentage of carrier present in a recording element 106 with heated roll 100. While Jurrens et al. does not explicitly recite that a predetermined percentage of carrier is removed, it is inherent in the design of the system that the carrier removed be within an adequate, predetermined range that achieves the desired function without removing too much carrier and causing damage to the recording element. Jurrens et al. also discloses a step of increasing a durability characteristic of the recording element 106 by coating it with a thermal transfer overcoat material 12 and passing the recording element between two rollers 100 and 116. This step is separate from the step of removing the carrier as is shown by the insertion of the recording element 106 into different slots 102 and 104.

10. Claims 1 and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Takekoshi et al. (US 2003/0234847).

With respect to claim 1, Takekoshi et al. discloses a system for treating a recording element including a carrier removal station 72A,72B and a converting station 300,210 which applies a protective coating that increases the durability of the recording element as shown in Figure 1 of Takekoshi et al. While Takekoshi et al. does not explicitly recite that a predetermined percentage of carrier is removed, it is inherent in the design of the system that the carrier removed be within an adequate, predetermined range that achieves the desired function without removing too much carrier and causing damage to the recording element.

With respect to claim 31, Takekoshi et al. discloses exhaust fan 220.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takekoshi et al. (JP 10-291304) as applied to claim 1 and 15-24 above, and further in view of Vincent et al. (US 5,650,808).

With respect to claims 2-4, Takekoshi et al. discloses the claimed apparatus for treating a recording element except for specifying how much of the carrier is removed. However, Vincent et al. teaches an apparatus for treating a recording element including a carrier removal station 68 which "completely dries" the recording element (Vincent et al., col. 3, lines 40-42). In other words substantially 100% of the carrier is removed. It would have been obvious to combine the teaching of Vincent et al. with the apparatus disclosed by Takekoshi et al. for the advantage of preheating the recording element so that it is brought up to the proper temperature for printing for the particular type of recording element (Vincent et al., col. 3, lines 42-47).

13. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takekoshi et al. (JP 10-291304) as applied to claims 1 and 15-24 above, and further in view of Peter (US 6,283,590).

Takekoshi et al. discloses the claimed apparatus for treating a recording element except for the cooling fan. However, Peter teaches a system for treating a recording element including a carrier removal station 60 with a cooling fan 62. It would have been obvious to combine the teaching of Peter with the system for treating a recording element disclosed by Takekoshi et al. for the advantage of preventing damage to the recording element should it stall or jam (Takekoshi et al., col. 4, lines 1-11).

14. Claims 12 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al. as applied to claims 1, 5-9, 11, 13, 17, 20, 22-26, 28 and 30 above, and further in view of Bhatia et al. (US 5,517,214).

With respect to claims 12 and 26, Goldberg et al. discloses the claimed apparatus for treating a recording element except for the operating parameter being adjustable by a user. However, Bhatia et al. teaches an apparatus for treating a recording element that includes a carrier removal section 8. A user can adjust several parameters of the carrier removal station 8 as disclosed in col. 3, lines 42-47 and lines 59-62. It would have been obvious to combine the teaching of Bhatia et al. with the apparatus disclosed by Goldberg et al. for the advantage of allowing the user specify settings for different types of recording elements.

Allowable Subject Matter

15. Claims 10, 14 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

16. The following is a statement of reasons for the indication of allowable subject matter:

Claim 10 has been indicated as containing allowable subject matter primarily for the preheating station positioned between the carrier removal station and the converting station.

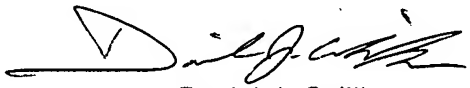
Claim 14 has been indicated as containing allowable subject matter primarily for the operating parameter being the percentage of carrier to be removed.

Claim 29 has been indicated as containing allowable subject matter primarily for the controller that adjusts the percentage of carrier removed based on a characteristic of the recording element.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Colilla whose telephone number is (571)272-2157. The examiner can normally be reached Mon.-Thur. between 7:30 am and 6:00 pm. Faxes regarding this application can be sent to (703)872 - 9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached at (571)272-2168. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Daniel J. Colilla
Primary Examiner
Art Unit 2854

January 14, 2005